

(Translation)

OFFICIAL ACTION
(Preliminary Notice of Rejection)

Application No.:

2001-205020

Date of Service:

January 16, 2004

This application is to be rejected on the grounds as set forth below. A response to this Official Action, if any, should be made within three months from the date of service as above.

GROUNDS

Ground 1:

The subject matter as claimed in the following claims in this application is obvious to those skilled in the art from the following document(s) made available in Japan or foreign countries prior to the effective filing date of this application. Accordingly, this application will be rejected under Art. 29 (ii) of the Japanese Patent Law.

NOTE (Refer to the list of cited references)

- Claim 1
- Cited reference 1
- Note:

In the column of means to solve the problem (particularly in No. 11 paragraph) in the cited reference 1, "a mask substrate with a light-shielding layer and a resist layer laminated", "beam scanning repeated in 2 cycles or 3 cycles", "stitching error", and "developing to a resist layer" correspond to "a substrate having a photosensitive material", "multiple irradiation passes to write a pattern of a specific structure", "stitching error and exposure non-uniformity" and "developing the photosensitive material" in the claim of the present invention. In the method of forming mask of the cited reference 1, it is recognized that remaining resist is removed finally.

LIST OF CITED REFERENCES

1. Japanese Patent Laid-Open Publication No. 2000-47363

Ground 2:

This application does not satisfy the requirements set forth in Art. 37 of the Japanese Patent Law.

NOTE

A common problem between the invention of Claim 1 and the inventions of Claim 2-36 is to reduce stitching error and exposure non-uniformity. This problem, however, is not an un-solved problem at the filing of the present invention because it has been already solved before filing the present application as in the cited reference 1. Therefore, the present inventions do not satisfy the requirement of Art. 37 (i) of the Japanese Patent Law.

Also, multiple irradiation passes which is a matter to define the invention corresponding to the common problem to be solved to the both inventions is a known art prior to the filing of the present invention as in the cited reference 1.

A substantial part which is a novel matter to define the invention corresponding to the problem to be solved does not exist. Therefore, the present inventions do not satisfy any relationship required in Art. 37 (iii), (iv) and (v) of the Japanese Patent Law.

Since the present invention violates the requirement of Art. 37 of the Japanese Patent Law, no examination of patentability of Novelty, Inventive Step and so on is conducted as to inventions of Claims other than Claim 1.

(Translation)

OFFICIAL ACTION
(Preliminary Notice of Rejection)

Application No.:
2001-205020

Date of Service:
June 18, 2002

This application is to be rejected on the grounds as set forth below. A response to this Official Action, if any, should be made within three months from the date of service as above.

GROUND S

Ground 1:

The subject matter as claimed in the following claims in this application is obvious to those skilled in the art from the invention(s) described in the following document(s) or made available to the public through electric telecommunication lines in Japan or foreign countries prior to the effective filing date of this application. Accordingly, this application will be rejected under Sec. 2 of Art. 29 of the Japanese Patent Law.

NOTE (Refer to the list of cited references)

- claims 1-7, 23-25
- Cited references 1-4
- Note:

In the cited references 1-4 is described an exposure method utilizing a photo resist flattened through a heat treatment.

It is easily conceived to one ordinary skill in the art to make a pattern transferring method such as the subject matter of the present invention utilizing the exposure method of the cited references.

Claims 29-35 of the present inventions are directed to the invention of "microstructure", and the manufacturing method thereof does not contribute to the "microstructure" as a finished item.

Ground 2:

The claims attached to this application is so obscure in the following item that this application does not satisfy the requirements set forth in Sec. 6 para.2 of Art. 36 of the Japanese Patent Law.

NOTE

Claim 33 describes "the temperature is ..." but there is no antecedent base in claim 29.

Therefore, the subject matter of claim 33 is not clear.

The remaining claim or claims other than the claim or claims referred to in this preliminary notice of rejection may be presumed patentable, but may be rejected when a new ground of rejection is subsequently found.

LIST OF CITED REFERENCES

1. Japanese Patent Laid-open Publication No. 8-107056
2. Japanese Patent Laid-open Publication No. 4-330715
3. Japanese Patent Laid-open Publication No. 5-61206
4. Japanese Patent Laid-open Publication No. 60-161621